

WHAT IS CLAIMED IS:

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1. A method for operating a communication system, comprising the steps of:
transmitting a first information frame;
selectively receiving a first response in response to transmission of the first
information frame;
measuring a first amount of time between transmission of the first
information frame and receipt of the first response; and
selectively modifying a response time value in response to the first amount
of time.
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2. The method of claim 1, wherein a step of modifying, further comprises the
step of:
incrementing an initial response time value by a timer resolution value, to
form the response time value.
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3. The method of claim 2 wherein the initial response time value is
incremented up to a maximum response time value.
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4. The method of claim 2 wherein the initial response time value is a default
value.

- 1 5. The method of claim 1 wherein the response time approximates an amount
2 of time the communication system requires to transfer the first information
3 frame between a first data processing system and a second data processing
4 system.
- 1 6. The method of claim 1 wherein the response time value is dynamically
2 modifiable in response to the first amount of time.

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1 7. A method for operating a communication system, comprising the steps of:
2 transmitting a first frame of information;
3 initiating operation of a timer with a first response time;
4 determining when a first query response has been received; and
5 selectively incrementing the first response time when the first query
6 response has been received.

1 8. The method of claim 7 wherein the first response time is incremented by a
2 timer resolution value.

1 9. The method of claim 7, further comprising the steps of:
2 setting a transmit sequence value when the first frame of information is
3 transmitted;
4 initiating operation of a response timer when the first information frame is
5 transmitted;
6 comparing the transmit sequence value and a receive sequence value when
7 the first response is received; and
8 idling operation of the response timer when the transmit sequence value
9 corresponds to the receive sequence value.

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1 10. The method of claim 9, further comprising the steps of:
2 restarting operation of the response timer when the transmit sequence value
3 differs from the receive sequence value.

1 11. The method of claim 7, further comprising the steps of:
2 transmitting a second information frame;
3 selectively receiving a second response in response to transmission of the
4 second information frame;
5 measuring a second amount of time between transmission of the second
6 information frame and receipt of the second response; and
7 selectively initializing a query timer with a maximum response time value.

1 12. The method of claim 11, further comprising the step of:
2 selectively modifying the response time value to correspond to a residual
3 time value remaining in a response timer after the second amount of
4 time has passed.

1 13. The method of claim 12 wherein the response time value is selectively
2 modified to equal the residual time value plus a timer resolution value.

1 14. The method of claim 7 wherein the first response time is a default value.

- 1 15. The method of claim 14 wherein the default value corresponds to a
2 maximum amount of time the communication system requires to transfer
3 the first frame of information between a first data processing system and a
4 second data processing system.
- 1 16. The method of claim 7 wherein the first response time is incremented up to
2 a maximum response time value.

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1 17. A first data processing system for communicating with a second data
2 processing system, comprising:
3 interface means for transmitting a first information frame and for
4 selectively receiving a first response in response to transmission of
5 the first information frame;
6 a timer for measuring a first amount of time between transmission of the
7 first information frame and receipt of the first response, the timer
8 being coupled to the interface means; and
9 a central processing unit coupled to the timer for selectively modifying a
10 response time value in response to the first amount of time.

1 18. The first data processing system of claim 17 wherein the central processing
2 unit dynamically modifies the response time value in response to the first
3 amount of time.

1 19. The first data processing system of claim 17, further comprising:
2 means for incrementing the response timer value by a preselected time
3 period in response to the first amount of time.

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